

CLAIM AMENDMENTS:

Claims 1-11 (canceled)

Claim 12 (New): A constant force socket, comprising:

a socket body having two, opposing, axially aligned holes formed therein, a first one of the holes being a coupling hole adapted to receive a workpiece therein, and a second one of the holes being an inner hole, the inner hole having an interior threaded region located proximate an open end thereof, a bottom of the inner hole having a ring of teeth thereat, the ring of teeth extending around an entire inside periphery of the inner hole, each tooth in said ring of teeth having an inclined side and a vertical side;

a ratchet wheel disposed inside the inner hole, and having a first end and a second end, and having a first region and a second region, the first region having a diameter that is greater than a diameter of the second region, the first region terminating at the first end and the second region terminating at the second end, said ratchet wheel further comprising a ring of teeth disposed at the first end thereof, each tooth in said ring of teeth of said ratchet wheel having an inclined side and a vertical side, the ring of teeth of said ratchet wheel engaging the ring of teeth of said socket body, said ratchet wheel further having a torsion tool hole with an opening thereof being formed at the second end, the torsion tool hole being adapted to receive a tool;

a coil spring mounted around the second region of said ratchet wheel, and having a first end that abuts against the first region of said ratchet wheel to urge the ring of teeth of said ratchet wheel into meshing engagement with the ring of teeth of said socket body; and

a toroid-shaped pressure adjusting element having an exterior threaded region threadably engaging the interior threaded region in said inner hole, said pressure adjusting element pressing against a second end of said coil spring, whereby rotation of said pressure adjusting element within said inner hole adjusts an amount of pressed force on said spring and thus on said ratchet wheel, an inner hole of said pressure adjusting element being in axial alignment with the torsion tool hole, so that the tool, when it is received in the torsion tool hole, passes freely through the inner hole of said pressure adjusting element;

wherein when said constant force socket is utilized to tighten the workpiece, the inclined sides of the teeth of said socket body engage with the inclined sides of the teeth of said ratchet wheel, until a predetermined force therebetween causes said ratchet wheel to overcome the pressed force of said spring and to move in a direction of said pressure adjusting element, thereby causing the teeth of said socket body to disengage with the teeth of said ratchet wheel; and

wherein when said constant force socket is utilized to loosen the workpiece, the vertical sides of the teeth of said socket body engage with the vertical sides of

the teeth of said ratchet wheel, to prevent the teeth of said socket body from disengaging with the teeth of said ratchet wheel.